

**SYSTEM AND METHOD FOR MANAGING MEMORY  
COMPRESSION TRANSPARENT TO AN OPERATING SYSTEM**

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**ABSTRACT OF THE DISCLOSURE**

In a computer system having an operating system and a compressed main memory defining a physical memory and a real memory characterized as an amount of main memory as seen by a processor, and including a compressed memory hardware controller device for controlling processor access to the compressed main memory, there is provided a system and method for managing real memory usage comprising: a compressed memory device driver for receiving real memory usage information from the compressed memory hardware controller, the information including a characterization of the real memory usage state; and, a compression management subsystem for monitoring the memory usage and initiating memory allocation and memory recovery in accordance with the memory usage state, the subsystem including mechanism for adjusting memory usage thresholds for controlling memory state changes. Such a system and method is implemented in software operating such that control of the real memory usage in the computer system is transparent to the operating system.